

**Appendix H. Environmental Commitment Plan / Mitigation Monitoring and Reporting Plan Conveyance of Refuge Water Supply Project East Sacramento Valley Study Area *Final Environmental Assessment [and FONSI] / Initial Study [and MND]* Gray Lodge Wildlife System Improvements – Addendum No. 1**

The Environmental Commitment Plan (ECP) / Mitigation Monitoring and Reporting Plan (MMRP) for the *Conveyance of Refuge Water Supply Project East Sacramento Valley Study Area Final Environmental Assessment [and FONSI] / Initial Study [and MND] Gray Lodge Wildlife System Improvements Addendum No. 1* has been prepared to satisfy the requirements of the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA).

In accordance with NEPA and CEQA, the Bureau of Reclamation is the NEPA Lead Agency and the California Department of Fish and Game (CDFG) is the CEQA Lead Agency for preparation of the Addendum and the incorporated Environmental Commitment Plan / Mitigation Monitoring and Reporting Plan. As such, these co-Lead Agencies are responsible for ensuring the mitigation program is implemented. Several agencies will be responsible for verification and timing of specific aspects of the mitigation program.

The *Final Environmental Assessment [and FONSI] / Initial Study [and MND]* recommended mitigation measures to avoid, minimize, rectify, reduce, eliminate or compensate for potentially significant impacts caused by construction, operation or maintenance of project implementation. Implementation of the ECP/MMRP would reduce potentially significant impacts to a less than significant level.

The measures listed below are a carry-over from the *Final Environmental Assessment [and FONSI] / Initial Study [and MND]*, and where necessary have been modified based on the project design and updated technical reconnaissance. Specific resource topics areas are followed by a listing of measures and/or project design features. The agency responsible for carrying out each measure is listed, as well as, the required timing of compliance and date of compliance. It should be noted, not all resource topics areas require a mitigation program as determined in the *Final Environmental Assessment [and FONSI] / Initial Study [and MND]*

The ECP/MMRP includes both Project Design Features (PDFs) and Mitigation Measures (MMs). The PDFs are design elements inherent to the Project that reduce or eliminate potential impacts. Because PDFs are incorporated into the Project, either in the Project design or by law as part of Project implementation, they do not constitute mitigation measures. However, the PDFs are described within the mitigation program and are described within the analysis of the Addendum. Where applicable, mitigation measures are provided to reduce potential impacts to a less than significant level.

**ENVIRONMENTAL COMMITMENT PLAN (ECP)  
MITIGATION MONITORING AND REPORTING PLAN (MMRP)**

MITIGATION MEASURE or PROJECT DESIGN FEATURE	AGENCY MONITOR	TIMING OF COMPLIANCE	DATE OF COMPLIANCE
<b>LAND USE</b>			
<b>LU - 5:</b> Implement standard occupational Safety and Health (OSHA) construction practices.	Reclamation CDFG	During grading and construction	
<b>BIOLOGICAL RESOURCES</b>			
<b>BR- 1:</b> Conduct pre-construction surveys prior to final design to identify locations of special-status plants. Surveys must be timed to coincide with the flowering seasons of the targeted species. Following pre-construction surveys, avoid impacts to special-status plants by through facility routing.	To Be Determined (TBD)	Prior to earth work	
<b>BR-2:</b> Where avoidance of special-status plants is not practicable, develop and implement measures for mitigating impacts, including relocation or reestablishment of special-status plant populations. Mitigation would involve creating suitable habitat in non-suitable habitat by providing soil, water, and vegetation to replicate conditions needed to establish special-status species populations.	TBD	During and following earth work	
<b>BR-7:</b> Conduct pre-construction surveys for raptors (including Swainson's hawk) prior to the peak March-through-August nesting period. Construction during the critical nesting period (March through August) will be avoided, OR if nesting pairs and fledglings are identified within 0.25 miles of construction, a monitoring program will be initiated in consultation with the Department.	TBD	Prior to earth work	
<b>BR-10:</b> Conduct pre-construction surveys for GGS. Surveys should be conducted between April 15 and June 1 by a qualified biologist. During final design, avoid all habitat features to the extent possible that contain GGS or provide suitable habitat for giant garter snake (GGS).	TBD	Prior to earth work	

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<p><b>BR-11A:</b> All permanent and temporary GGS habitat affected by the Proposed Action would be fully mitigated as determined jointly by the Service and CDFG: If a snake is observed during construction, operations in the immediate area will cease, the Service will be notified &amp; measures consistent with the Service’s Appendix D (USFWS 1999) will be implemented.</p>	TBD	Following construction activities	
<p><b>BR-14:</b> Develop and implement a monitoring plan to assess the success of mitigation measures for impacts to special-status wildlife. Success criteria shall be clearly defined for all measures implemented to mitigate for project impacts to wildlife. Yearly reports should be submitted to the Service and the Department. If success criteria are being met after 3 years of monitoring, no additional monitoring is necessary.</p>	TBD	During and following construction Activities	
<p><b>BR-15:</b> Conduct pre-construction delineations of wetlands and other waters of the United States. Request a verification of the delineated boundaries from the U.S, Army Corps of Engineers (ACOE). Following verification of the delineation boundaries, develop measures to avoid impacts to jurisdictional wetlands</p>	TBD	Prior to earth work	
<p><b>BR-16:</b> After final design, quantify impacts to wetlands and other waters. Submit to ACOE a permit application for discharge of fill material into waters of the United States, pursuant to Section 404 of the Clean Water Act</p>	TBD	Prior to earth work	

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<b>BR-17:</b> Install and maintain appropriate erosion and sedimentation controls during and following construction as specified in the required Erosion Control Plan (see Hydrology and Water Quality section).	TBD	During and Following Construction	
<b>BR-19:</b> Develop and implement mitigation plans for impacts to wetlands. Replace eliminated wetlands at a 2: 1 ratio. Temporarily impacted wetlands should be restored onsite. Stockpile topsoil removed from wetlands and store in upland landscape positions. Following construction disturbance, restore the land surface contours and backfill the top 6 to 12 inches with stockpiled topsoil.	TBD	During and Following Construction Activities	
<b>BR-20:</b> Following project completion, monitor the site to assess mitigation success. Success criteria should be clearly defined for all measures implemented to mitigate for project impacts to wetlands. Yearly reports should be submitted to the Service and COE until implementation has been determined to be successful.	TBD	Following Project Completion	
<b>PDF 1:</b> Prior to construction, a worker environmental-awareness training in the recognition of northwestern pond turtle and their habitat shall be conducted by a qualified biologist. If a turtle is observed on the site, work shall cease in the area until the turtle can be moved to a safe location.	TBD	Prior to earth work	
<b>PDF 2:</b> Prior to initiating construction activities that may cause the failure of nesting activities by passerine bird species nesting within or in close proximity to the Study Area, a qualified biologist will survey the area to determine if nesting passerine bird species are present and whether they are afforded the protection of the Migratory Bird Treaty Act (MBTA). If nesting bird species protected by the MBTA are present, a buffer will be established by the qualified biologist to preclude the failure	TBD	Prior to earth work	

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of the nest until chicks have fledged and left the nest. If no nesting birds are discovered in proximity of the project, no further action is necessary			
<b>PDF 3:</b> If swallows begin colonizing a bridge before March 1, all nest precursors (mud placed by swallows for the construction of nests) shall be knocked or washed down at least once daily until demolition is complete or the swallows cease trying to construct nests, whichever is first. Under no circumstances can this activity result in harm or death to any adult swallows or their eggs	TBD	During construction work	
<b>PDF 4.</b> If the proposed bridge construction activities are to occur during the cliff swallow's breeding season (April through July), the underside of the bridge shall be covered with ½ to ¾ inch mesh netting before March 1. The netting shall remain in place until demolition of the structure. The netting must be anchored such that the swallows cannot construct their nests in the bridge. It is recommended that once such netting is put in place, a monitor visit the site weekly to check for signs that swallows are trying to nest under the bridge. If swallows enter the netted area and begin nest building, the net's integrity shall be repaired. If a swallow successfully completes a nest and lays eggs within the netted area of the bridge, all bridge modifications shall be suspended until the nestlings have fledged.	TBD	During construction work	
<b>PDF 5:</b> If netting of bridges or applicable canal structures does not occur by March 1 and cliff swallows colonize any structure associated with the canal, demolition of the isolated structure shall be postponed until August 1, or until all nestlings have fledged	TBD	During construction work	